# Guidance and Advice **K22**

## **Transition Career Development Award**

**National Cancer Institute** 

## I. IMPORTANT ANNOUNCEMENTS:

The following guidance and advice are derived from the NCI Program Announcement (PA), number PAR-01-134 titled "NCI Transition Career Development Award", issued in the NIH Guide on September 4, 2001. You can access this announcement directly by "clicking on" the following the website address: <a href="http://grants.nih.gov/grants/guide/pa-files/PAR-01-134.html">http://grants.nih.gov/grants/guide/pa-files/PAR-01-134.html</a>. After consulting the official announcement, the information and clarifications provided below together with the Form PHS 398 application kit should be all you need to prepare an application for a Transition Career Development Award or **K22**.

## II. BACKGROUND:

The NCI Transition Career Development Award or **K22** provides "protected time" for newly independent investigators to develop and receive support for three years for their initial cancer research programs. This award is intended to facilitate the transition of investigators from the mentored to the independent stage of their careers in cancer research. It applies to clinicians who are pursuing basic science careers; clinicians who are pursuing careers in patient-oriented research; and to individuals pursuing careers in the prevention, control, behavioral and population sciences. Candidates are eligible for this award if they have completed TWO YEARS OR MORE of postdoctoral mentored research or have been in an independent position for LESS THAN TWO YEARS at the time the application is submitted. The most unique feature of this research career development award is that individuals can apply while they are still in a postdoctoral, "mentored" position **without** any sponsoring institution. In this latter situation, a successful postdoctoral applicant (i.e., approved for funding) has up to 12 months to identify an independent position. For postdoctoral applicants, the sponsoring institution for a K22 award can be their current institution or a new institution. Awardees must apply for an R01 research grant or equivalent prior to the end of the second year of support.

Many individuals in fields critically important to the future of cancer research need protected time to develop successful independent research programs. This is particularly true for medically trained individuals and for individuals pursuing cancer research careers in the prevention, control and population sciences. These individuals often require extended periods of mentored research training beyond their original doctoral degrees (e.g., M.D., Dr.PH). In addition, upon completion of their mentored research training, these individuals are often at a competitive disadvantage in obtaining independent research support relative to their traditional basic science Ph.D. counterparts, who generally have many more years of postdoctoral research training and experience. Also, the survival of scientists in these critical research career tracks is threatened by the economics of medical care, which forces M.D.s away from research into practice; and by the organizational make-up of the majority of the nation's academic institutions, which does not provide academic homes and tenure-track positions for prevention, control and population scientists.

A critical mass of clinical cancer researchers and researchers in cancer prevention, control, behavioral and the population sciences capable of interacting with basic science researchers is needed to ensure effective translation of basic research discoveries into patient and population research settings if there is to be optimal progress in reducing cancer incidence, mortality and morbidity. There is therefore a need to stabilize the career tracks of the most promising of these investigators while they are establishing their first independent research programs. The NCI Transition Career Development Award or **K22** provides a mechanism for addressing these needs. Additionally, the **K22** supports the 1998 recommendation of the National Research Council for the establishment of "career-transition" grants to provide senior postdoctoral fellows " the financial independence to begin new scientific projects of their own design in anticipation of their obtaining a fully independent position".

## III. ELIGIBILITY:

- 1. **Institution:** Only domestic, non-Federal organizations, public or private, such as medical, dental or nursing schools or other institutions of higher education, may accept an award on behalf of the candidate.
- 2. Candidate: Eligible candidates must be doctorally degreed individuals who have been educated as clinicians (e.g. M.D.s, Oncology Nurses) or as prevention, control and population scientists (e.g., Ph.D.s, DPHs, M.D.s) and are ready to pursue independent careers in cancer research. The transition award is NOT for basic scientists following a traditional basic science research career track (e.g., Ph.D.s in molecular biology). Minorities and women in the above fields are encouraged to apply. Candidates must currently be in a "mentored" CANCER research postdoctoral position and have completed TWO YEARS OR MORE of research in this capacity at the time of the application, or be in a position suitable for an independent research career for LESS THAN TWO YEARS with continuous previous postdoctoral CANCER research training at the time of the application. Candidates in a postdoctoral position are eligible to apply for an NCI Transition Career Development Award WITHOUT an institutional affiliation.

The one exception to the above are postdoctoral candidates who are working in basic science, who are **employed in a federal facility** (e.g., NIH, EPA) and who have at least three years of mentored postdoctoral experience at the time of the award. The intent of the NCI in using the K22 for those candidates is to provide a similar opportunity already available to extramural postdoctoral basic scientists through the Howard Temin Award or K01. These K22s must be directly relevant to human cancer and will be reviewed by the same standards as the Howard Temin Award. For more information on the Howard Temin Award, consult the following website: <a href="http://grants.nih.gov/grants/guide/pa-files/PAR-00-066.html">http://grants.nih.gov/grants/guide/pa-files/PAR-00-066.html</a> and NCI staff **before** preparing an application (see XI. INQUIRIES).

Former principal investigators on NIH Small Grants (R03s), Exploratory/Developmental Grants (R21s), mentored career development awards (i.e., K07, K08, K23) or the equivalent are ELIGIBLE to apply. However, former principal investigators on NIH research project grants (R01s), FIRST Awards (R29s), sub-projects on Program Project Grants (P01s) or center grants (P50s) and the equivalent are **NOT ELIGIBLE**.

Candidates must be U.S. citizens or non-citizen nationals, or must have been lawfully admitted for permanent residence and possess an Alien Registration Receipt Card (I-151 or I-551) or some other verification of legal admission as a permanent resident. Non-citizen nationals, although not U.S. citizens, owe permanent allegiance to the U.S. They are usually born in lands that are not states, but are under U.S. sovereignty, jurisdiction or administration. **Foreign nationals and individuals on temporary or student visas are NOT ELIGIBLE**.

## **IV. MECHANISM OF SUPPORT:**

The Transition Career Development Award uses the **K22** grant mechanism and provides candidates up to **three years** of support. Planning, direction and execution of the program is the responsibility of the candidate on behalf of the institution. **K22s are not renewable**.

## V. ALLOWABLE COSTS:

The NCI Transition Career Development Award or **K22** provides for the following costs:

1. **Salary**: Candidates may request up to \$75,000 per year **plus** fringe benefits for salary, which would require a 75% commitment of time to the development of an independent research program with the remaining 25% time devoted to activities related to the development of a research career.

The actual level of salary support requested **must** be consistent both with the established salary structure at the institution and with salaries actually provided by the institution from its own funds to other staff members of equivalent qualifications, rank, and responsibilities.

The institution may supplement the NIH salary contribution up to a level that is consistent with the institution's salary scale; however, supplementation may not be from Federal funds unless specifically authorized by the Federal Program from which the funds are derived. Because the salary amount provided by this award is based on a full-time institutional salary, no other PHS funds may be used for salary supplementation. Institutional supplementation of salary must NOT require extra duties or responsibilities that would interfere with the purpose of the **K22**. Under the expanded authorities, institutions may rebudget funds within the total costs awarded to cover salaries consistent with the institution's salary scale.

2. Research Development Support: Up to \$50,000 in direct costs per year may be requested for research development expenses which include the following: (a) books and other reference materials needed for career development; (b) research expenses such as supplies, equipment and technical personnel; (c) travel to research meetings and the like; (d) statistical and computational services including personnel and computer time. All expenses must be directly related to the research of the career development program

The level of Research Development Support will be negotiated downward on the basis of scientific overlap with the acquisition of independent grant support for the same purpose from any funding source.

- 3. **Ancillary Personnel Support**: Salaries for mentors, secretaries, administrative assistants and other ancillary personnel are **not allowed**.
- 4. Facilities and Administrative Costs (formerly called indirect costs): These costs may be reimbursed at 8 percent of modified total direct costs.
- 5. Other general policies related to costs:
  - a. The NCI does not allow grant related income (i.e., fees) from clinical practice, professional consultation, or other comparable activities required by the research provisions of this award to be retained by the career award recipient. These fees must be assigned to the grantee institution for disposition by one of the several approved NIH methods.
  - b. **Funds freed up** from other NCI-supported research or training grants as a result of a **K22** award may not be rebudgeted by the institution.
  - c. A candidate may request up to a 12 month **leave of absence** without award support with prior written approval from the NCI.
  - d. The NCI can consider a **change of institution** post-award if the Candidate makes a request to NCI Program Staff prior to any change occurring.

For appropriate advice and specific instruction regarding the above and other budgetary and administrative policies that you must follow in managing this award, please refer to section **XI. INQUIRIES.** 

## **VI. SPECIAL PROVISIONS AND REQUIREMENTS:**

1. Eligible candidates (See section III. ELIGIBILITY REQUIREMENTS) can apply for a one-time, non-renewable, three year K22 grant WITHOUT an institutional affiliation (See Application Procedures) while they are in a postdoctoral "mentored" position; OR can apply with an institutional affiliation while in the first year of a independent position, as long as they have had continuous "mentored" postdoctoral research experience before taking the position. Postdoctoral candidates who have competed successfully for funding will be notified by the NCI with a "Letter of Intent to Commit Funds." Candidates in a postdoctoral position will then have

**one-year** from the date of the letter to find an institution that offers a position, preferably tenure-track, suitable for enhancing a research career. For candidates who already have a position in a sponsoring institution, negotiations with the institution will begin without delay. Negotiations will be initiated by asking the candidate's institution to submit a **"Statement of Environment and Institutional Commitment"** to the NCI. This Statement of Commitment should guarantee that the candidate will be able to spend 75% time developing an independently funded research program and the remaining 25% in activities consistent with the candidate's development into an independent investigator, and should present arrangements with the candidate that provide a permanent preferably tenure-track position, adequate facilities for conducting a research program, and additional resources conducive to the development of a research project.

- 2. The candidate is expected to submit a research grant application to the National Institutes of Health or equivalent funding organization for peer review and funding consideration before the end of the second year of support. Confirmation of such application, e.g., face page of submitted application with all signatures, must be sent to NCI Program Staff.
- 3. A candidate for a **K22** may not simultaneously submit or have pending an application for any other PHS award that duplicates any of the provisions of this award.
- 4. Salary and Research Development Costs: The NCI establishes the upper limits of \$75,000 for salary support plus fringe benefits and the \$50,000 for research development costs. Other institutes/centers at the NIH can implement different dollar levels for these categories at their discretion.
- 5. Evaluation: In carrying out its stewardship of human resource-related programs, the NCI or the NIH may request information essential to an assessment of the effectiveness of this program. Accordingly, recipients may be contacted after completion of this award for periodic updates on various aspects of their employment history, publications, support from research grants or contracts, honors and awards, professional activities and other information helpful in evaluating the impact of the K22 program.

## **VII. APPLICATION PROCEDURES**

## SUBMISSION, REVIEW AND AWARD OF A COMPETING APPLICATION

The following information, together with the Public Health Service (PHS) Form PHS 398 grant application kit, should provide the information and instruction you need to submit an application to the National Institutes of Health.

## A. Application Receipt, Review and Award Dates:

The receipt dates for **K22** applications are February 1, June 1, and October 1. Peer review for scientific merit by an NCI-managed review group is usually completed in June, October and February, respectively. Review by the National Cancer Advisory Board is usually completed by October, January and May, respectively. The earliest possible Award dates are December 1, April 1 and July 1, respectively.

## B. Where to send the Application:

An **original and three** copies of the application should be submitted to:

Center for Scientific Review (CSR)
National Institutes of Health
Suite 1040
6701 Rockledge Drive, MSC 7710
Bethesda, Maryland 20892-7710
Bethesda, Maryland 20817 (for express/courier service)

In order to expedite the review of the application, please send two additional copies to the NCI address below:

Referral Officer National Cancer Institute 6116 Executive Boulevard, Room 8062 MSC 8329 Bethesda, Maryland 20892-8329 Rockville, MD 20852 (for express/courier service)

## C. Format for Submitting the Application:

In submitting a **K22** grant application, the applicant must use the Form PHS 398 (last revised 4/98). Use the special instructions provided in Form PHS 398 for career awards on pages IV-1 through IV-7, page LL and page MM. In addition pay attention to the "Modified Instructions for Preparing a **K22** Application" noted below. You can obtain application forms by "clicking on" the following NIH website address: <a href="http://grants.nih.gov/grants/funding/phs398/phs398.html">http://grants.nih.gov/grants/funding/phs398/phs398.html</a>. Forms are also available at most institutional offices of sponsored research, and from the Division of Extramural Outreach and Information Resources, National Institutes of Health, 6701 Rockledge Drive, MSC 7910, Bethesda, MD 20892-7910, pHone (301) 435-0714, FAX: (301) 480-0525, Email: GrantsInfo@nih.gov.

## Notes of Caution:

- 1. **Type density and size** must conform to the specifications on page 6 of the PHS Form 398, or CSR **will return** the application without review.
- 2. NIH does not allow simultaneous submission of a career award and a research grant application for evaluation in the same review cycle. If this happens, you application **will be returned**.

## General Advice in Preparing an Application:

- In preparing a K22 application, it is highly recommended that you make regular reference to the Review Criteria under section VIII. REVIEW PROCEDURES AND CRITERIA. The success of your application in addressing these criteria will determine its competitiveness for funding.
- 4. Please note that on Page LL you are required to indicate whether you are a U.S. citizen or non-citizen national OR a permanent resident of the U.S. If you are a permanent resident, you must have a notarized statement to this effect provided to the NCI before an award can be made.

## Modified Instructions for Preparing a K22 Application:

In general, follow the Form PHS 398 special instructions for individual research career awards on pages IV-1 through IV-7, page LL and page MM. However, since the **K22 differs from other career awards** in two important ways: (1) training is not a required component and (2) there is no mentor, the NCI asks that you modify the instructions as follows:

- 5. On page IV-3, the K22 is not listed as one of the career awards for providing OTHER SUPPORT. We strongly advise you to provide OTHER SUPPORT. For example, many applicants may have competed successfully for NRSA individual fellowships (F32s), the Mentored Clinical Scientists Development Awards (K08s), other career awards offered by NIH (e.g., K07s, K23s, K01s etc.), OR equivalent competitive awards from other funding organizations. If peer reviewers know that your have already successfully competed for career support, this could increase their enthusiasm for your K22 application and the competitiveness of the application for funding.
- 6. On page IV-4, you should ask references (item **2. Letters of Reference**) to address the following issues in place of those on the standard page MM:

- The adequacy of the applicant's scientific background for the proposed research and the applicant's career goals.
- The quality of the applicant's scientific productivity and achievements (e.g., publications, intellectual contributions to his/her research environment).
- The applicant's ability to work with other scientists in various interactive situations (e.g., seminars, journal clubs), on collaborative research projects, and with support staff (e.g., technicians, nurses, secretaries).
- Evidence of the applicant's originality and innovativeness in pursuing a research problem.
- The applicant's special potential to develop, establish and manage an independent research program.

Note: One of the three letters of reference **must** be submitted by the candidate's most recent sponsor.

- 7. On page IV-4 under item **3. The Candidate**, you do not have to fill out 3c.
- 8. Since there is no Sponsor (i.e., Mentor), there is no need in item 4. for Statements by Sponsor(s), but you should discuss any Consultants and/Collaborators who will be involved in your research.
- 9. In preparing item 6. Research Plan, candidates should consider the following: Since you are being evaluated for your promise as an independent investigator, the research plan will be considered more stringently by peer reviewers than it would be for someone who is still mentored. However, while preliminary data is always helpful to reviewers in evaluating a research plan, you are not expected to provide preliminary data. This application affords you the opportunity to obtain preliminary scientific data for the submission of an investigator-initiated research grant to the NIH or other funding organization.

## ANNUAL PROGRESS REPORT/APPLICATION FOR CONTINUATION

The NIH Center for Scientific Review will automatically notify you and give you instructions **four months** before the next anniversary date that your application for continuation is due. Look for this notification; if you do not receive it, call the NIH Data Management branch at (301) 435-0896. The awardee must submit the application for continuation at least **two months** prior to the anniversary date of the grant. If for some reason time becomes an issue, contact the NCI (see XI. INQUIRIES).

Please follow the instructions for a Research Career Award Continuation on pages IV-1 and IV-2 provided using Form PHS 2590 (last revised 4/98), Application for Continuation of a Public Health Service Grant. You can obtain this form directly by "clicking on" the following NIH website address: <a href="http://www.nih.gov/grants/funding/2590/2590.htm">http://www.nih.gov/grants/funding/2590/2590.htm</a>. Also, forms are available from the same sources noted above for the Form PHS 398. Use the following modifications and considerations in preparing your progress report:

- 1. For item 3. Other Support, it is very important that the NCI know of any grants that you have pending for funding consideration or have received funding for during the course of the last year of support on the K22. Also, before the end of the second year of support, you are required to submit an application for independent research support to either the NIH or an equivalent funding organization and provide evidence of this to the NCI (i.e., face page of the application signed by the business officials of your institution).
- 2. For item 4. Progress Report Summary, please use the instructions on pages 7 and 8 of the Form PHS 2590 rather than on page IV-1 and IV-2.

## **VIII. REVIEW PROCEDURES AND CRITERIA**

## A. Review Procedure:

Upon receipt, the application will be reviewed initially by both the Center for Scientific Review (CSR) and the NCI for completeness and for conformance to all eligibility requirements and special provisions and requirements. (See section **III. ELIGIBILITY** and Section **VI. SPECIAL PROVISIONS AND REQUIREMENTS** above). Incomplete or ineligible applications **will be returned** to the applicant without further consideration.

Those application judged to be both complete and eligible will be further evaluated according the peer review criteria stated below for scientific merit by a standing peer review group convened by the *Division of Extramural Activities* (<a href="http://deainfo.nci.nih.gov/extra/dea.htm">http://deainfo.nci.nih.gov/extra/dea.htm</a>) of the NCI. A second level of review by the National Cancer Advisory Board will also review the application to ensure that it meets the broad program needs and priorities of the NCI.

## B. Review Criteria:

The following review criteria will be applied:

## Candidate:

- (for candidates already in a position) Suitability of the position for the candidate to pursue an independent research career
- Quality of the mentored period of cancer research training in terms of research experiences, didactic experiences, and other experiences (e.g., special skills, perspectives, techniques) that will enhance the candidate's ability to pursue and independent cancer research career in a chosen area of research (e.g., basic research, clinical or patient oriented research; prevention, control, and population research)
- Scientific productivity during the "mentored" period of career development
- Potential ability to successfully manage an independent research project
- Ability to interact and collaborate with other scientists
- Potential to become a successful independent investigator during the three-year term of this award
- Support of LETTERS OF REFERENCE on behalf of the candidate.

## Research Plan:

- The originality, innovation and scientific merit of the proposed Research Plan relative to the experience level of the applicant.
- The extent to which the Research Plan goes beyond the mentored environment and will test new concepts and ideas
- The medical and/or health significance of the Research Plan to Cancer.
- The adequacy of plans to include genders, minorities and children and other subgroups in any clinical or population research activities.
- The adequacy of the proposed protection of humans, animals or the environment to the extent they may be adversely affected by activities proposed in the application.

## Budget:

 Adequacy of the proposed budget items for the achievement of the career development and research objectives of the award.

## IX. Award Criteria

For postdoctoral candidates in "mentored" positions with no institutional sponsorship, the NCI will notify candidates who have competed successfully for funding with a "Letter to Commit Funds." This letter will give the candidate **one-year** to find an institution that offers a position suitable for enhancing a research career. For candidates in independent positions, negotiations with the candidate and institution will begin immediately. After the NCI has received a "Statement of Commitment" from the institution, the NCI will

determine if the institution has offered a "sound" plan for the candidate's transition to an independent research career. This determination will be based on the following criteria:

- 1. Documentation of a strong institutional research environment that will enhance and compliment the candidate's areas of research interest and provide opportunities for scientific interactions and collaborations.
- 2. Adequacy of the institution's commitment to ensure that 75 percent of the candidate's total effort will remain devoted to the development of an independently funded research program.
- 3. Adequacy of the institution's formal arrangements with the candidate to provide a permanent preferably tenure-track position, adequate facilities for conducting a research program, and the other resources needed for the development of a research project and a successful independent research career.

If the NCI judges the "Statement of Environment and Institutional Commitment" to be sound a plan and commitment to the candidate: (1) **for postdoctoral candidates** the institution will be asked to submit a new face page using Form PHS 398 with sections 6-14 and section 16 completed OR 2) For **candidates who already have a position** in a sponsoring institution, the NCI only needs to make an award. An award can be terminated prior to the beginningg of the third year by the NCI if the candidate does not submit an RO1 type grant application or equivalent for peer review before the end of the second year of support (See section **VI. SPECIAL PROVISIONS AND REQUIREMENTS)** 

## X. COMMON QUESTIONS AND ANSWERS

1. How is eligibility determined for the K22 Career Transition Award and who is responsible for making this determination?

Eligibility is determined by NCI Program Staff.

The **first determination** is made at the time the application is submitted to assess whether you are EITHER in a "mentored" postdoctoral position at the time of the application OR you have been in an independent faculty position or the equivalent for less than a year at the time of the application submission deadline AND have had **continuous** "mentored" postdoctoral experience prior to attaining the position. BUT, if you have been in an independent position for more than two years, **regardless of the circumstances**, you are ineligible. Some applicants have been in an independent position for several years but chose to continue under a mentor to further their training and wish to interpret their eligibility beginning at the time when they truly initiated their own independent research. The NCI interpretation is not based on when you began to do independent research but is based on the date of appointment to a position from which you could have started your independent research.

The **second determination** is made after the review of the application. If your application is competitive for funding, the NCI will seek to confirm the following in a written "Statement of Environment and Institutional Commitment" from the institution:

- a. The existence of a strong research environment that will enhance and complement the candidate's research interests AND provide opportunities for scientific interactions and multi-disciplinary collaborations.
- b. Adequacy of the institution's commitment to ensure that 75 per cent of the candidate's total effort will remain devoted to the development of a research project and a successful independent research career.
- c. Adequacy of the institution's **formal** arrangements with the candidate to provide a permanent preferably tenure-track position, adequate facilities for conducting a research program, and the other resources needed for the development of a research project and a successful independent research career.

If the NCI judges the "Statement of Environment and Institution Commitment" to be a **sound** plan and commitment to the candidate, an award will be made. If the NCI judges this Statement to be

deficient, it will give the institution a chance to improve the nature of the position for the candidate.

The NCI will not make a K22 award until this Statement is approved by the Program Staff.

2. How does the "Letter or Intent to Commit Funds" work?

If a candidate in a mentored postdoctoral position applies for a K22 without an institutional affiliation and the application receives a peer review competitive for funding, the NCI will provide the candidate with a "Letter of Intent to Commit Funds". The candidate has one year from the date on the letter to find and negotiate a position that will satisfy the requirements noted in question 1 above. The NCI fully expects candidates to use the "Letter of Intent to Commit Funds" as a leveraging instrument for negotiating the best faculty position (or equivalent) possible.

3. How are the salary levels and other costs associated with Career Development Awards determined?

Each institute and center at the NIH has the authority to determine the upper salary levels and other cost levels for Career Development Awards (i.e., K-awards) as a matter of institute policy. Thus, the NCI's levels do not necessarily equal or match the levels supported by another institute. For the NCI, all individual career awards for "mentored" postdoctoral scientists and for junior faculty establishing their first independent research programs use the same salary and other cost levels. If you are a individual in a "mentored" postdoctoral position (e.g., K08, K23), you can receive up to \$75,000 in salary plus fringe benefits and up to \$30,000 in other costs associated with your research. If you are junior faculty, the upper salary remains the same, but you can receive up to \$50,000 in other costs.

If you go to the *NIH website*, the salary and other cost levels that each institute supports are listed.

4. Why do I need to send extra copies of my career award application?

These extra copies are vitally important to the timely processing and review of your application. The copies to the **Center for Scientific Review (CSR)**, which is the central receipt point for all grant applications to the NIH, ensures that the application is given the appropriate grant number and assigned to the National Cancer Institute for peer review. CSR does the critical logging in and processing of the paperwork.

Unlike the regular research grants (e.g., R01s), CSR does NOT ORGANIZE and conduct the peer review system for career awards. Each institute and center at the NIH manages the their own peer review system for career awards. The **extra copies** that you send directly **to the NCI** ensure that the review process is initiated in a timely way and avoids the possibility that CSR can mishandle or lose your application.

5. Should I send a cover letter with my career award application?

The first processing step by Center for Scientific Review (CSR) is to assign funding responsibility for your application to an institute; this is called the "referral" process. If your research is obviously cancer research, then it will be assigned to the NCI. But if you feel that your application is cancer research and are concerned that it could be assigned to an institute other than the NCI, then a cover letter explaining the significance of the research to cancer will be helpful. Also, if you feel that your research is related to cancer research and other areas of research, it may be to your advantage to provide an explanation. CSR can give an application a "dual referral" and make an assignment to two or more institutes. For example, if your application were related to cancer and aging the grant number would begin with a CA/AG or an AG/CA, reflecting CSR's

view of the primary emphasis of the research. When there is a dual assignment, this ensures that more than one institute can consider your application for funding.

6. How important is the font size in preparing the application?

This is very important. Follow the directions on page 6 of the Form PHS 398 application kit or your application will be returned by the Center for Scientific Review.

Can I supply additional information after I have submitted my Career Award application to the NIH?

Yes, but this must be submitted after receiving approval from the NCI Scientific Review Administrator (SRA) in charge of reviewing your grant. You must identify your SRA, explain your situation, receive approval and send the additional information in time to provide reasonable opportunity for the reviewers to include it in their evaluations. Examples of additional information that is important for reviewers to examine would be new experimental data that strengthens the rationale for pursuing the research project and manuscripts that have been accepted for publication, especially if they are to peer-reviewed journals.

8. Who will review my career award application?

Your application will be reviewed by a scientific review group organized by an NCI Scientific Review Administrator. It will have the necessary expertise to judge the merit of your application, the suitability of the sponsor, the institutional commitment, and your potential to develop into an independent investigator.

9. How will reviewers evaluate my application?

The reviewers will evaluate your application using the review criteria provided in the NIH/NCI announcement that corresponds to the particular career development award that applies to you. It is very important that you **prepare your application in response to these criteria** because your ultimate success in receiving funding will depend upon how well your application addressed these criteria.

10. Do I have to be a U.S. citizen to receive a career award?

You must be a U.S. citizen or U.S. non-citizen national or have been lawfully admitted into the U.S. as a permanent resident and possess an Alien Registration Receipt Card (I-151 or I-551) or some other verification of legal admission as a permanent resident **at the time of the award**. Please note that on page LL of the Form PHS 398 application kit, you are required to indicate whether you are a U.S. citizen or non-citizen national or provide verification of your permanent resident status. No award can be made until this is confirmed.

11. Can I apply for a research grant from the PHS and still keep my career development award?

Yes, but you cannot receive any additional salary from another Federal grant if it were to be funded even if the career award does not equal your actual salary. The institution can pay you additional salary from non-Federal sources or from grants from Private funding organizations, as long as it does not exceed the institutional salary scales. **Remember**, in the case of a **K22** Career Transition Award, you **must** provide evidence before the end of the second year of support that you have submitted a research grant to the NIH or to an equivalent funding organization.

12. If I submit a grant application after receiving a Career Development Award, how is this reconciled in terms of percent effort and the restriction?

Many NIH centers and institutes make you give up a career award if you are awarded an NIH research grant. With the proviso that you are expected to spend no less than a 75% full-time professional effort on the research **proposed in your career award**, the NCI usually allows applicants to receive research grant support under the following conditions:

- a. If the research grant proposal is **the same** as that in the career award, then you cannot have any more than a 25% effort on the research grant. The NCI assumes that you are spending a 100% effort on the research as proposed in your career award and allows you to use the remaining 25% of your time for this purpose that goes beyond the minimum 75% full-time effort.
- b. If the research grant proposes some of the **same objectives** as that proposed in the career award as well as **other objectives** not in the career award, the NCI allows you to apply for up to a 50% effort on the grant. In this case, the first 25% effort on the research grant is considered overlap with and subsumed by the 75% full-time commitment on the career award and the second 25% effort on the research grant is considered what you are doing with your remaining time on the career award.

In neither of these two cases can you receive any salary from the NIH grant. All of the salary provided from the PHS must come from your career award.

If a special situation exists, you should consult the appropriate Grants Administration Official (see XI. INQUIRIES).

13. What should my application contain if it deals with human subjects, clinical trials or vertebrate animals?

If your research proposal deals with human subjects, you must check item 4a "yes" on the face page of the Form PHS 398 application and provide documentation that this research has been certified by the institution's IRB. You must also provide the required information for Gender and Minority Inclusion and Inclusion of Children as Participants in research involving Human Subjects OR provide sufficient information/justification for exemptions to be evaluated by peer reviewers. This information is located on pages 16, 17, 18 and 27, 29 of the Form PHS 398 application kit. If you are using vertebrate animals, you must check item 5 on the Form PHS 398 and follow the instructions on page 18 of the Form PHS 398 application kit.

Without the proper information on Gender and Minority Inclusion, Inclusion of Children and Vertebrate Animals, an award cannot be considered until this aspect of the review is completed. If an application is fundable, the NCI must be provided with the human subject IRB certification before an award can be made.

14. If I have an award and I would like to ask for post award changes? How do I go about this?

You must contact the NCI Grants Administration official to determine the appropriate procedures to use in making a request for post award changes in your grant. This also applies to any of your needs that require a prior approval from the NCI. In general, you will have to make a request that is signed by you and a business offical of your institution. After receiving the request, the Grants Administration offical will consult with the NCI scientific program staff as necessary to determine whether the request can be approved.

## XI. INQUIRIES (K22):

We have tried to provide you with the most complete information possible about the **K22**, as well as answer the most frequently asked questions. If you need information and explanation concerning the **K22**, please make your inquiries as follows:

## A. Programmatic or scientific issues:

If you need more information and/or advice about the objectives and scope of this award, eligibility

requirements, structure and organization of grant applications and peer review trends, please contact us by "clicking on" the INQUIRIES link directly below. You will be contacted promptly by one of the scientific professionals of the Cancer Training Branch of the NCI.

## **B. Fiscal Issues:**

If you need information about the appropriate procedures for dealing with issues that involve changes in the sponsoring institution, the scope of the project as awarded, budget and period of support of the award or that involve any other issues requiring approval by the NCI or post award actions, please contact us by "clicking on" the INQUIRIES link directly below. You will be contacted promptly by one of the Grants Administration officials of the NCI.